

DCARML-010

- 2 -

IN THE CLAIMS

Please replace all claims in the instant application with the listing below withdrawing claims 12-15, and 32 but reserving the right for rejoinder upon the allowance of a generic claim as follows:

- 1 1. (Previously Presented) A lifting sling, said lifting sling comprising:
  - 2
  - 3 a plurality of core materials; and
  - 4
  - 5 a coating material, said coating material comprising at least an isocyanate mixed
  - 6 with an amine forming polyurea, said coating material is sprayed onto said
  - 7 plurality of core materials, the thickness of said coating material is regulated in a
  - 8 predetermined pattern to achieve desired operational properties of said lifting
  - 9 sling.
- 10
- 1 2. (Previously Presented) The lifting sling in accordance with claim 1, wherein said
- 2 coating material is selected from the group consisting of a polyurea elastomer, a
- 3 polyurethane, or a hybrid polyurethane – polyurea elastomer.
- 4
- 1 3. (Previously Presented) The lifting sling in accordance with claim 1, wherein said
- 2 coating material has an operational temperature range of -40 to 175 degrees Celsius.
- 3
- 1 4. (Previously Presented) The lifting sling in accordance with claim 1, wherein said
- 2 coating material has a tensile strength in the range of up to 6,500 pounds per square inch,
- 3 an elongation range of up to 300 percent, and a tear resistance in the range of up to 600
- 4 pounds per linear inch.

DCARML-010

- 3 -

5

1       5. (Previously Presented) The lifting sling in accordance with claim 1, wherein said  
2       coating material includes at least one of the following additives:

3

- 4           i)      a catalyst;  
5           ii)     a stabilizer;  
6           iii)    a pigment;  
7           iv)     a fire retardant;  
8           v)      a static electricity reducing additive;  
9           vi)     an ultraviolet filtering additive; or  
10          vii)    a thermal cycling additive.

11

1       6. (Previously Presented) The lifting sling in accordance with claim 1, wherein said  
2       plurality of core materials include at least one of the following:

3

- 4           i)      nylon;  
5           ii)     polyester;  
6           iii)    a synthetic fiber;  
7           iv)     polypropylene;  
8           v)      wire rope;  
9           vi)     steel core;  
10          vii)    cordage rope;  
11          viii)   yarn;  
12          ix)     NOMAX;  
13          x)      KEVLAR; or  
14          xi)     chain.

15

DCARML-010

- 4 -

1      7. (Previously Presented) The lifting sling in accordance with claim 1, wherein said lifting  
2      sling further comprising a safety core, said safety core being bonded proximate to said  
3      plurality of core materials.

4

1      8. (Previously Presented) The lifting sling in accordance with claim 7, wherein said safety  
2      core traverses said lifting sling.

3

1      9. (Previously Presented) The lifting sling in accordance with claim 7, wherein said safety  
2      core is located, with respect to said plurality of core materials, in at least one of the  
3      following locations:

4

- 5            i)      seam located;  
6            ii)     perimeter located; or  
7            iii)    centrally located.

8

1      10. (Previously Presented) The lifting sling in accordance with claim 7, wherein said  
2      safety core is interconnected with at least one of the following:

3

- 4            i)      an indicator; or  
5            ii)     an electronic system.

6

1      11. (Canceled)

2

1      12. (Withdrawn) The lifting sling in accordance with claim 1, wherein a multi-core lifting  
2      sling is formed by applying a seaming layer of said coating material to bond together at  
3      least one of the following:

4

DCARML-010

- 5 -

- 5           i)       a plurality of said plurality of core materials to form said multi-core  
6           lifting sling; or  
7           ii)      a plurality of previously coated said plurality of core materials to form  
8           said multi-core lifting sling.

9  
1       13. (Withdrawn) The lifting sling in accordance with claim 12, wherein said multi-core  
2       lifting sling further comprising a safety core, said safety core utilizes at least one of the  
3       following configurations:

- 4  
5           i)       a single said safety core is utilized to traverse each span of said multi-core  
6           lifting sling; or  
7           ii)      a plurality of said safety core are utilized where a unique said safety core  
8           traverses each span of said multi-core-lifting sling.

9  
1       14. (Withdrawn) The lifting sling in accordance with claim 12, wherein said multi-core  
2       lifting sling is formed having multiple free moving spans by applying said seaming layer  
3       only to the end portions of said multi-core lifting sling.

4  
1       15. (Withdrawn) The lifting sling in accordance with claim 14, wherein said multi-core  
2       lifting sling has interconnecting ribs.

3  
1       16. (Previously Presented) The lifting sling in accordance with claim 1, wherein said  
2       lifting sling further comprising at least one of the following:

- 3  
4           i)       an indicator secured proximate to said plurality of core materials; or  
5           ii)      an electronic system secured proximate to said plurality of core materials.

DCARML-010

- 6 -

1       17. (Previously Presented) The lifting sling in accordance with claim 16, wherein said  
2       electronic system further comprising at least one of the following:

3

- 4           i)       a microcontroller;
- 5           ii)      a graphical user interface;
- 6           iii)     a keypad;
- 7           iv)      a touch pad;
- 8           v)        a plurality of general purpose inputs and outputs;
- 9           vi)      a safety core interface;
- 10          vii)     a lifting sling measurement and dynamics interface;
- 11          viii)    an RFID interface;
- 12          ix)      an IRDA interface;
- 13          x)        a transceiver;
- 14          xi)      a wireless data link;
- 15          xii)     a LAN interface;
- 16          xiii)    a WAN interface;
- 17          xiv)     a serial data link;
- 18          xv)      a GPS interface;
- 19          xvi)     a power supply;
- 20          xvii)    a flash memory;
- 21          xviii)   a read only memory;
- 22          xix)     a real time clock;
- 23          xx)      an EEROM; or
- 24          xxi)     a NOVRAM.

25

1       18. (Previously Presented) The lifting sling in accordance with claim 16, wherein said  
2       indicator and or said electronic system indicates the operational condition of said lifting

DCARML-010

- 7 -

3       sling, the suitability for use of said lifting sling, and or the security status of an article  
4       secured by said lifting sling.

5

1       19-24 (Canceled)

2

1       25. (Previously Presented) A lifting sling, said lifting sling comprising:

2

3       a plurality of core materials;

4

5       a coating material, said coating material is disposed onto said plurality of core  
6       materials, said coating material is selected from the group consisting of a polyurea  
7       elastomer, a polyurethane, or a hybrid polyurethane – polyurea elastomer, wherein  
8       the location and thickness of said coating material is regulated to achieve desired  
9       operational properties of said lifting sling; and

10

11      an electronic system secured proximate to said plurality of core materials, wherein  
12     by way of said electronic system said lifting sling data communicates with a  
13     plurality of data processing devices and or a plurality of global network based data  
14     processing resources.

15

1       26. (Previously Presented) The lifting sling in accordance with claim 25, further  
2       comprising a cover, said cover being fitted around said plurality of core materials, said  
3       cover is coated with said coating material.

4

1       27. (Previously Presented) The lifting sling in accordance with claim 25, further  
2       comprising a cover, said cover being fitted around said plurality of core materials, said  
3       cover is coated and secured into position with said coating material.

DCARML-010

- 8 -

4

1 28. (Canceled)

2

1 29. (Previously Presented) A lifting sling, said lifting sling comprising:

2

3 a plurality of core materials; and

4

5 a coating material, said coating material is disposed onto said plurality of core  
6 materials, the thickness of said coating material is regulated in a predetermined  
7 pattern to achieve desired operational properties of said lifting sling;

8

9 said lifting sling further comprising at least one of the following:

10

- 11 i) an indicator secured proximate to said plurality of core materials;  
12 or  
13 ii) an electronic system secured proximate to said plurality of core  
14 materials;

15

16 wherein said indicator and or said electronic system indicates the operational  
17 condition of said lifting sling, the suitability for use of said lifting sling, and or the  
18 security status of an article secured by said lifting sling.

19

1 30. (Canceled)

2

1 31. (Previously Presented) The lifting sling in accordance with claim 29, wherein said  
2 lifting sling further comprising a safety core, said safety core being bonded proximate to  
3 said plurality of core materials.

DCARML-010

- 9 -

4

1       32. (Withdrawn) The lifting sling in accordance with claim 29, wherein a multi-core  
2       lifting sling is formed by applying a seaming layer of said coating material to bond  
3       together at least one of the following:

4

- 5           i)       a plurality of said plurality of core materials to form said multi-core lifting  
6       sling; or  
7           ii)      a plurality of previously coated said plurality of core materials to form said  
8       multi-core lifting sling.

9

1       33. (Previously Presented) The lifting sling in accordance with claim 1, further  
2       comprising a cover, said cover being fitted around said plurality of core materials, said  
3       cover is coated with said coating material.

4